

Cultural Resources Impact Assessment for the Ramona Grasslands Preserve Project, San Diego County, California

528269

Lead Agency:

County of San Diego
Department of Parks and Recreation
Contact: Ms. Jennifer Price
5500 Overland Avenue, Suite 410
San Diego, CA 92123
(858) 966-1375

Preparer:

ICF International
9775 Businesspark Avenue, Suite 200
San Diego, CA 92131
(858) 578-8964

A handwritten signature in blue ink, appearing to read 'M. Bever', is positioned above a horizontal line.

Michael R. Bever, Ph.D., RPA
Principal Investigator

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National Archaeological Data Base Information

Author(s): Michael R. Bever, PhD
Karolina A. Chmiel, MA

Consulting Firm: ICF International, 9775 Businesspark Avenue, Suite 200
San Diego, California 92131 858.578.8964

Client: County of San Diego, Department of Parks and Recreation, 5500
Overland Avenue, Suite 410, San Diego, California 92123

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Type of Study: Project Impact Assessment

New Sites: N/A

Updated Sites: None

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Acreage: 3,490 acres (approximately)

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TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
LIST OF ABBREVIATIONS/ACRONYMS	iii
EXECUTIVE SUMMARY	v
1.0 INTRODUCTION.....	1
1.1 <u>Project Description</u>	2
1.1.1 Preserve Resource Management Plan.....	2
1.1.2 Preserve Vegetation Management Plan.....	3
1.1.3 Preserve Public Access Plan	4
1.1.4 Other Infrastructure Improvements	7
1.2 <u>Existing Conditions</u>	9
1.2.1 Environmental Setting	9
1.2.2 Cultural Setting.....	9
1.2.3 Records Search Results	15
1.3 <u>Applicable Regulations</u>	16
1.3.1 California Environmental Quality Act	16
1.3.2 San Diego County Local Register of Historic Resources	16
1.3.3 San Diego County Resource Protection Ordinance	17
2.0 GUIDELINES FOR DETERMINING SIGNIFICANCE	18
2.1 <u>CEQA Guidelines</u>	18
2.2 <u>County Guidelines</u>	19
3.0 ANALYSIS OF PROJECT EFFECTS	20
3.1 <u>Methods</u>	20
3.1.1 Field Methods	20
3.1.2 Laboratory and Cataloging Procedures and Curation	20
3.1.3 Native American Participation and Consultation.....	20
3.2 <u>Results</u>	21
3.2.1 Preserve Resource Management Plan.....	21
3.2.2 Preserve Vegetation Management Plan.....	21
3.2.3 Preserve Multi-use Trail System	22
3.2.4 Infrastructure Improvements.....	24
4.0 INTERPRETATION OF RESOURCE IMPORTANCE AND IMPACT IDENTIFICATION	25
4.1 <u>Resource Importance</u>	25
4.2 <u>Impact Identification</u>	26
4.2.1 Preserve RMP and VMP	26
4.2.2 Preserve Multi-use Trail System	26
4.2.3 Preserve Infrastructure Improvements.....	27

5.0 MANAGEMENT CONSIDERATIONS-MITIGATION MEASURES AND DESIGN CONSIDERATIONS.....	29
5.1 <u>Mitigatable Impacts</u>.....	29
6.0 REFERENCES.....	32
7.0 LIST OF PREPARERS.....	38
8.0 LIST OF MITIGATION MEASURES AND DESIGN CONSIDERATIONS	39

CONFIDENTIAL APPENDICES
A – Figures 4-6: Resource Maps

LIST OF TABLES

<u>Title</u>	<u>Page</u>
1 Cultural Resources along Existing Trails	22
2 Cultural Resources along New Trails.....	23
3 Cultural Resources Associated with Preserve Improvements	24
4 Significance of Cultural Resources Associated with Trails and Improvements.....	25

LIST OF FIGURES

<u>Title</u>	<u>Follows Page</u>
1 Regional Location Map	2
2 Project Vicinity Map	2
3 Proposed Trails and Infrastructure Improvements	2
4a Potentially Impacted Cultural Resources in NW Portion of Preserve	Confidential Appendix A
4b (Detail) Proposed Trail and Bridge Crossings in NW Portion of Preserve	Confidential Appendix A
5 Potentially Impacted Cultural Resources along Proposed Trail on Non-Preserve Property	Confidential Appendix A
6 Potentially Impacted Cultural Resources in NE Portion of Preserve	Confidential Appendix A

LIST OF ABBREVIATIONS/ACRONYMS

ADA	Americans with Disabilities Act
AMSL	Above Mean Sea Level
ASMD	Area Specific Management Directives
BMF	Bedrock Milling Feature
B.P.	Before present
CEQA	California Environmental Quality Act
County	County of San Diego
DPR	County of San Diego Department of Parks and Recreation
DPW	County of San Diego Department of Public Works
GPS	Global Positioning System
MSCP	Multiple Species Conservation Program
NADB	National Archaeological Data Base
NAHC	Native American Heritage Commission
PAP	Ramona Grasslands Preserve Public Access Plan
RMP	Ramona Grasslands Preserve Resource Management Plan
RMWD	Ramona Municipal Water District
RPO	County of San Diego Resource Protection Ordinance
SCIC	South Coastal Information Center
USGS	United States Geological Survey
VMP	Ramona Grasslands Preserve Vegetation Management Plan

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EXECUTIVE SUMMARY

The purpose of this report is to analyze the potential effects on cultural resources associated with the proposed Ramona Grasslands Preserve Project (project). This analysis is intended to support the County of San Diego's (County) review process under the California Environmental Quality Act (CEQA) and other applicable local and state regulations. Specifically, this report summarizes the cultural resources at, or potentially occurring on, the proposed Ramona Grasslands Preserve (Preserve); analyzes impacts to cultural resources associated with implementation of the project; and recommends measures to avoid, minimize, or mitigate significant impacts to sensitive resources. The analysis presented herein follows applicable state and local rules and regulations including CEQA, and the County of San Diego's Local Register of Historical Resources and Resource Protection Ordinance (RPO).

The project has four components, including implementation of the management directives identified in the Ramona Grasslands Preserve Resource Management Plan (Preserve RMP) and the Ramona Grasslands Preserve Vegetation Management Plan (Preserve VMP); establishment of a multi-use trail system within the Preserve consistent with the Ramona Grasslands Preserve Public Access Plan (Preserve PAP); and construction of supporting infrastructure improvements. The Preserve RMP and Preserve VMP have both been developed by the County of San Diego Department of Parks and Recreation (DPR) to guide the management and preservation of biological and cultural resources within the Preserve.

As part of a previous cultural resources inventory for the Preserve, a total of 229 cultural resources, including 211 sites and 18 isolated finds, were identified. The 211 sites consist of 171 prehistoric sites, six multi-component, twenty-nine historic and five sites of unknown age. Of the 229 resources that could be impacted by implementation of the Preserve RMP and Preserve VMP, previous studies have tested and evaluated only 40 of these archaeological sites. Thirteen have been found significant, including 10 that have been found significant under the County of San Diego's RPO. Twenty-seven sites were evaluated as not significant, and the 18 isolates are also not considered significant. However, five of the resources evaluated as not significant would be part of a proposed archaeological district related to the ethnographic village of *Pa'mu*. As such, they, too, would be considered significant, as contributing elements to the district. The remaining 171 cultural resources have not been formally evaluated and are therefore considered significant.

Activities related to the Preserve RMP and Preserve VMP have the potential to impact cultural resources throughout the Preserve. A range of potential impacts might arise from implementation of the project. These include broad impacts related to the Preserve VMP and Preserve RMP management directives that involve any ground disturbing activity, such as fire management that involves ground disturbing activity or the use of mechanized equipment, and installation and maintenance of signage, fencing, and gates. However, both the Preserve RMP and Preserve VMP provide for methods that are designed to minimize impacts, such as passive habitat restoration. Further, in the Preserve VMP, mechanical vegetation removal of invasive non-native plants, which might impact cultural resources, is not anticipated. Regardless, implementation of the Preserve RMP and Preserve VMP does have the potential to adversely impact cultural resources. As such, potential impacts of the Preserve RMP and Preserve VMP must be considered, and

appropriate mitigation measures developed. Where feasible, the preferred mitigation is avoidance.

Implementation of the multi-use trail system and related infrastructure improvements has the potential to impact specific cultural resources during construction, use and maintenance of the facilities, although most of these facilities have been designed to avoid resources. However, a total of 11 resources has been identified that could be impacted by these activities. Only two of these resources have previously been evaluated, including County Survey Road 97 (P-37-030845), found significant, and the ranch complex (P-37-025102), found not significant. A third resource, CA-SDI-16579, a sparse, highly disturbed historic trash scatter, is recommended as ineligible. The remaining resources have not been evaluated and must be considered significant.

Mitigation measures have been developed for implementation of each of the components of the Preserve project. These include general, long-term mitigation measures that apply to the Preserve as a whole and correspond with management directives in the Preserve RMP and Preserve VMP, as well as specific mitigation measures related to development and construction of the trails and infrastructure improvements.

1.0 INTRODUCTION

The purpose of this report is to analyze the potential effects on cultural resources associated with the proposed Ramona Grasslands Preserve Project (project). This analysis is intended to support the County of San Diego's (County) review process under the California Environmental Quality Act (CEQA) and other applicable local and state regulations. Specifically, this report identifies the cultural resources at, or potentially occurring on, the proposed Ramona Grasslands Preserve (Preserve); analyzes impacts to cultural resources associated with implementation of the project; and recommends measures to avoid, minimize, or mitigate significant impacts to sensitive resources. The analysis presented herein follows applicable state and local rules and regulations including CEQA, the County of San Diego's Local Register of Historical Resources, and the County's Resource Protection Ordinance (RPO).

The Preserve is located in northern San Diego County approximately six (6) miles east of Interstate 15 (I-15), approximately 1.5 miles south of State Route 78 (SR-78), approximately 1.4 miles north of SR-67, and approximately two (2) miles west of downtown Ramona, California (Figures 1 and 2). The Preserve is primarily west of the Ramona Airport and east and north of Highland Valley Road. The Preserve is within the Santa Maria Valley, which consists of a broad basin surrounded by gentle hills and rocky rises ranging in elevation from approximately 410 meters (m) (1,350 feet [ft]) above mean sea level (AMSL) along the valley floor to over 518 m (1,700 ft) AMSL in the rocky hills of the northern sections of the Preserve.

The Preserve's 3,490 acres are divided among three distinct pieces with separate boundaries:

- The westernmost portion comprises two relatively large pieces (referred to as southwest [SW] and northwest [NW]) that are connected by a slim parcel of land. The SW portion is bounded to the south by Highland Valley Road, west by rural residential development, northeast by Ramona Municipal Water District (RMWD) land, and east by Rangeland Road. It consists of rolling hills with rocky outcrops and areas of oak woodlands that transition into the lower topography grasslands to the south. Santa Maria Creek also flows through this area of the Preserve. The NW portion is bounded to the south by an unpaved road and RMWD lands, and by rural residential development and open space along its other boundaries. It is characterized by rocky hills bisected by Bandy Canyon, through which Santa Maria Creek flows.
- The northeast (NE) portion is bounded to the south by the Ramona Airport, west by RMWD lands and rural residential development, north by rural residential development, and east by planned residential development and associated proposed open space. The NE area is characterized by rocky chaparral-covered hillsides in the north and lower topography grasslands in the south.
- The southeast (SE) portion is bounded to the south primarily by rural residential development, west by Rangeland Road and the SW portion of the Preserve, and north by RMWD land and the Ramona Airport. The SE area consists of low, rolling hills supporting grasslands and rocky outcrops. The Santa Maria Creek channel follows the southern boundary.

1.1 Project Description

The project has four components, including implementation of the management directives identified in the Ramona Grasslands Preserve Resource Management Plan (Preserve RMP) (County 2011a) and the Ramona Grasslands Preserve Vegetation Management Plan (Preserve VMP) (County 2011b); establishment of a multi-use trail system within the Preserve consistent with the Ramona Grasslands Preserve Public Access Plan (Preserve PAP) (County 2010), a component of the Preserve RMP; and construction of supporting infrastructure improvements (Figure 3). The Preserve RMP and Preserve VMP have both been developed by DPR to guide the management and preservation of biological and cultural resources within the Preserve. Each of these four project components is discussed in more detail below.

1.1.1 Preserve Resource Management Plan

The Preserve RMP will provide Area-Specific Management Directives (ASMDs) pursuant to the requirements of the Draft North County Multiple Species Conservation Program (North County MSCP) and the associated Draft Framework Resource Management Plan. Specifically, the Preserve RMP establishes baseline conditions from which adaptive management will be determined and success will be measured; guides the management and monitoring of biological and cultural resources to protect and enhance their values; serves as a guide for appropriate onsite public uses; and provides an overview of the operation and maintenance requirements to implement management goals.

The Preserve RMP includes management directives and implementation measures to meet Multiple Species Conservation Program (MSCP) goals and objectives under the following elements: A) Biological Resources; B) Vegetation Management; C) Public Use, Trails, and Recreation; D) Operations and Facility Maintenance; and E) Cultural Resources. Detailed implementation measures associated with each management directive can be found in the Preserve RMP. Specific implementation measures that have the potential to affect cultural resources are identified below.

Vegetation Management

- Management Directive B.1 – Restore degraded habitats to protect and enhance populations of rare and sensitive species through stabilization of eroded lands and strategic revegetation.
- Management Directive B.2 – Reduce, control, or where feasible eradicate invasive, non-native flora known to be detrimental to native species and/or the local ecosystem.

Public Use, Trails, and Recreation

- Management Directive C.3 – Provide appropriate interpretive and educational materials
- Management Directive C.4 – Install and maintain fencing and gates within the Preserve.
- Management Directive C.5 – Properly maintain trails for user safety, to protect natural and cultural resources, and to provide high-quality user experiences.

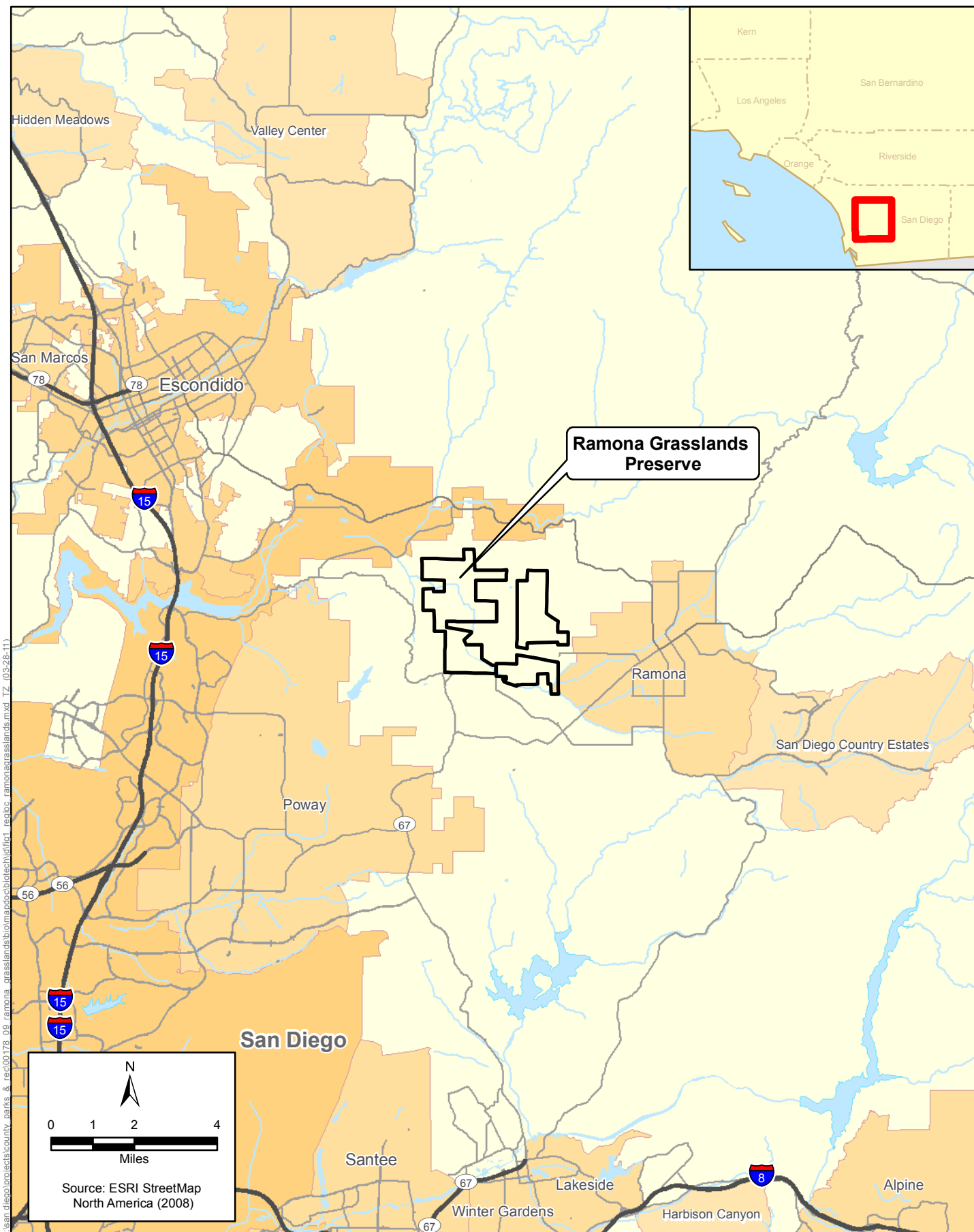


Figure 1
Regional Location
Ramona Grasslands Preserve

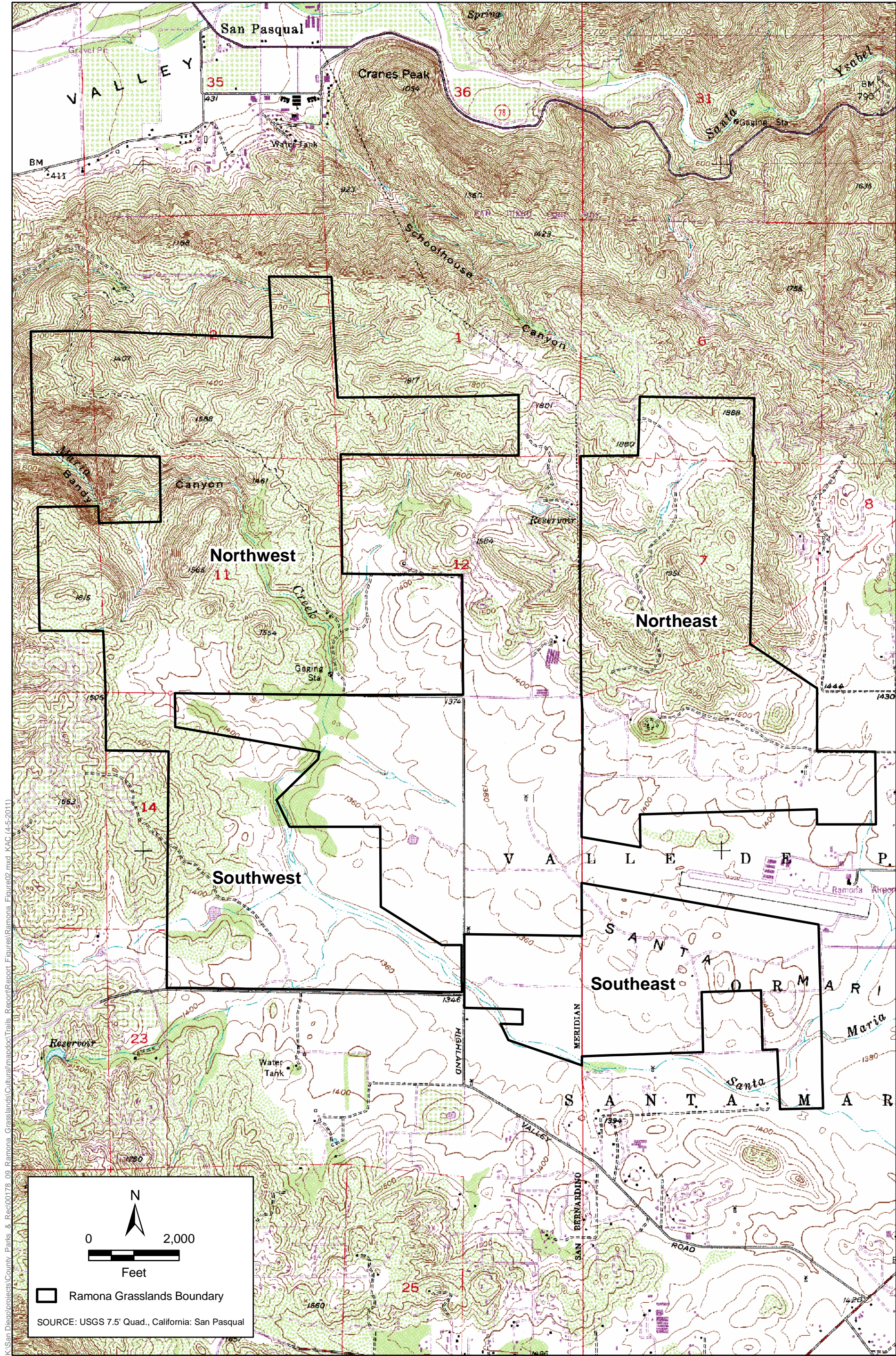


Figure 2
Project Vicinity Map
Ramona Grasslands Preserve

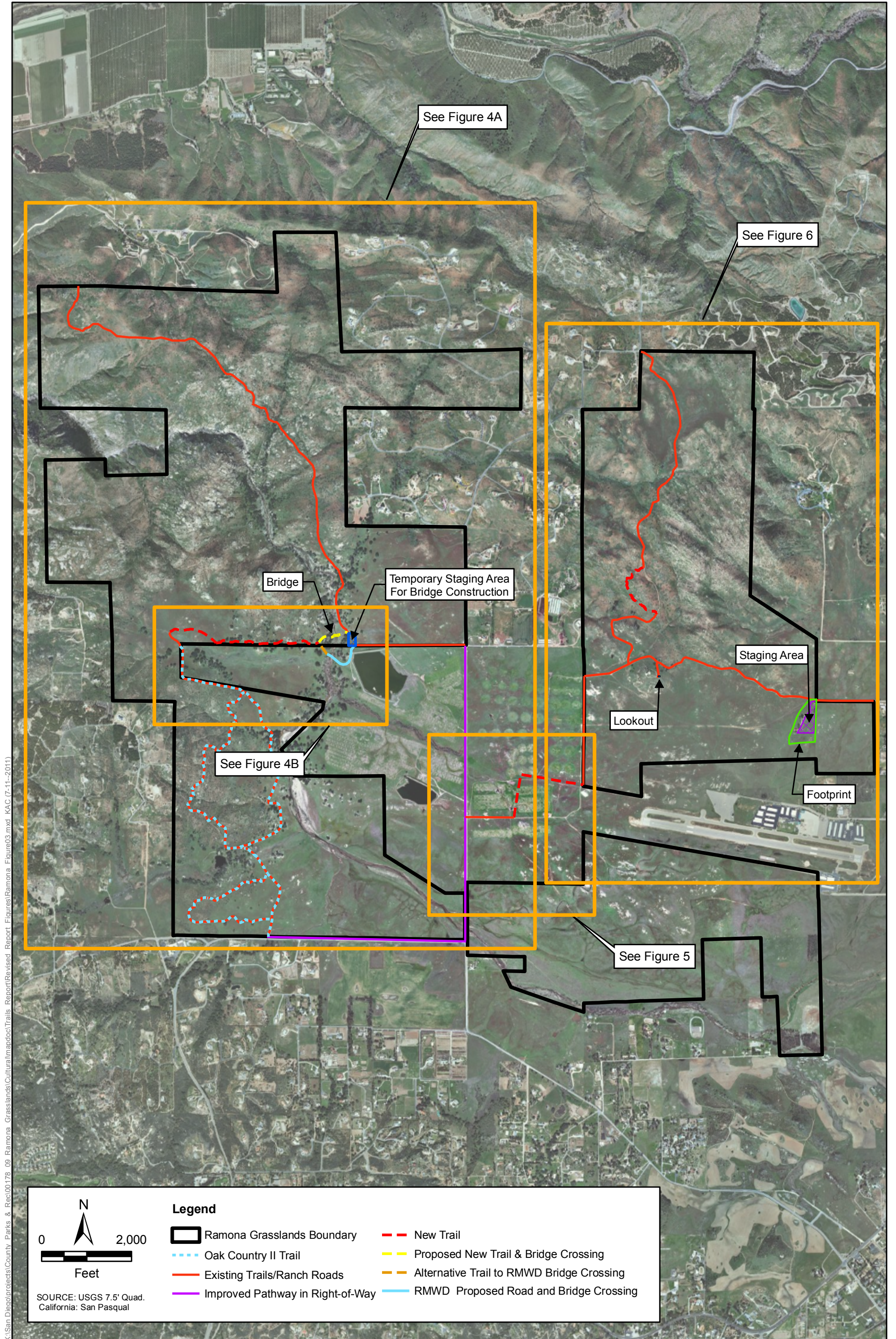


Figure 3
Proposed Trails and Infrastructure Improvements
Ramona Grasslands Preserve

Management Directive C.6 – Develop, install, and maintain appropriate signage to effectively communicate important information to Preserve visitors.

1.1.2 Preserve Vegetation Management Plan

Similar to the Preserve RMP, the Preserve VMP provides management guidance through specific and adaptive management practices with its focus on the vegetative resources within the Preserve. The Preserve VMP will enhance appropriate habitat for native target species through removal and control of invasive non-native species; provide a framework for the restoration of closed trails within the Preserve; provide a fire management strategy that plans for wildland fires; and provide a grazing management plan based on historic, current, and proposed regimes.

The Preserve VMP includes management directives under the following elements: invasive non-native species management; habitat restoration; grazing; and fire management. Management actions that have the potential to impact cultural resources include:

Invasive Non-native Species Management

Directives for invasive non-native plant species management focus primarily on several targeted invasive non-native plant species found within the Preserve. Invasive non-native plant species management includes annual inspections of all previously infested Preserve areas and documentation of newly infested areas, followed by treatment (i.e., hand or mechanical removal and disposal, herbicide treatment, prescribed fire or grazing in grasslands) of individual invasive non-native plants prior to flowering and seed set. Treated areas would be monitored to ensure effectiveness of treatment efforts.

Habitat Restoration

Habitat restoration directives support reestablishment of areas of the Preserve through natural processes (i.e., passive restoration) to the extent feasible. Active restoration activities would only occur following landscape changing disturbances that remove, damage, degrade, or alter the desired native habitats. Active restoration methods would be tailored to the type of disturbance and would require preparation of a detailed restoration plan. Management directives for habitat restoration include monitoring of invasive non-native plant species removal sites to ensure passive natural recruitment is successful; monitoring habitat quality for sensitive wildlife species to determine if active restoration is necessary to return habitats to pre-fire habitat quality; and monitoring for the presence of disease or pest levels to determine outbreaks and prescribe appropriate treatment.

Fire Management

Management directives related to fire management focus on the cooperation between Cal Fire, the Ramona Fire Department and DPR for maintaining a safe fire environment at the Preserve. These directives include providing Cal Fire and the Ramona Fire

Department with guidance regarding the natural resource and cultural values at risk during wildfires that threaten the Preserve; minimizing the disturbance of natural and cultural resources during fire suppression on the Preserve when feasible; providing defensible space within the Preserve adjacent to improvements through fuel modification zones; and limiting public access to the Preserve during periods of high wildland fire danger using methods such as seasonal closures; and limit potential of wildfires by posting no smoking signs.

1.1.3 Preserve Public Access Plan

An approximately 11.5-mile multi-use trail system for hiking, biking, and equestrian users will be established connecting the four portions of the Preserve consistent with the Preserve PAP recommendations (Figure 3). The trail system would utilize existing ranch roads and trails to the greatest possible extent, with some new trail construction and a crossing of Santa Maria Creek to increase connectivity in the Preserve. The plan also involves an alternative route that would utilize a road and bridge crossing on RMWD property, to be constructed by RMWD. If this alternative is chosen, DPR would be required to construct a short trail segment on RMWD land to connect to the road and bridge. Approximately ten miles of the proposed trail system already exists in the form of 4-10 foot wide dirt roads that either remain from prior ranching activity or were recently constructed as part of the Oak Country II Trails Project. New trails would be constructed in the NW and NE portions of the Preserve. Note that increased pedestrian traffic and accessibility in itself may also lead to direct impacts through vandalism, looting or the inadvertent destruction of artifacts, features, and site integrity.

Proposed trails and pathways are described below for each portion of the Preserve.

Trail and Pathway Alignments

Southwest Portion

Public access in this portion of the Preserve is provided by the recently constructed Oak Country II trails, comprising approximately four miles of trails in two connected loops. The Oak Country II trail project includes a staging area off Highland Valley Road with two shaded picnic areas, ten vehicle parking spaces with overflow room and pull-through parking for four vehicles towing trailers. No additional trail improvements are proposed at the SW portion as part of the project, with the exception of the connection to the NW portion discussed below.

Northwest Portion

Approximately three miles of trails are proposed for the NW portion of the Preserve, including about 2.35 miles that trace part of Old Survey Road 97. Construction of a new 0.7-mile trail segment will connect the southern end of Old Survey Road 97 with the Oak Country II trails in the SW portion of the Preserve. This connection would necessitate crossing Santa Maria Creek (see discussion below). Near the northwest corner of the NW portion of the Preserve, the existing Old Survey Road 97 splits into a southern and northern route. The southern route would be closed and passively restored as habitat.

Public access in the NW portion of the Preserve includes a proposed crossing of Santa Maria Creek, which initially would be a dry weather crossing. At some point in time, an all weather

structural crossing (e.g., bridge) would be constructed for pedestrian, cyclist, and equestrian use. The structural crossing would have a maximum width of 12 feet and would consist of non-slip and all-weather materials consistent with the guidelines from the Community Trails Master Plan (County 2005 updated in 2009). The structural crossing would be designed with sufficient length to span Santa Maria Creek with little to no direct impacts to federal and state jurisdictional waters or wetlands. A temporary construction staging area would be established during bridge construction. Approximately three miles of trails are proposed for this portion of the Preserve, consisting of existing unpaved ranch roads and trails and new trail construction.

An alternative to the proposed crossing of Santa Maria Creek discussed above is to utilize a crossing proposed to be constructed by RMWD as part of their Santa Maria Wastewater Treatment Plant Expansion project. The proposed crossing is located immediately south of the northwest portion of the Preserve on land owned by RMWD. This alternative would require permission from RMWD and could be utilized after RMWD constructs the proposed crossing. DPR would need to construct a short (375-foot) segment of trail to connect to the RMWD road and bridge crossing.

Primary access to the proposed trails in the NW portion of the Preserve is from the east via a 0.5-mile public road easement (i.e., unpaved road) that lies between the NW portion of the Preserve and RMWD property. This unpaved road intersects with the proposed pathway along Rangeland Road. There would be no provisions for vehicle parking at this location. This access point would include a kiosk for visitor orientation and general information. Secondary access would occur via a proposed new trail segment connecting with the Oak Country II trails in the SW portion of the Preserve. Visitors would be able to reach this access point by using the existing Oak Country II staging area.

Northeast Portion

Primary access to the proposed trails in the NE portion is from the east, which can be reached via an unpaved and unnamed road extending west from Montecito Way. A new staging area would be constructed directly east of a vacant house with associated barn and rodeo corral. The staging area would be approximately three acres in size and would include visitor parking for 30 cars and 18 vehicles with horse trailers with room for overflow parking, hitching rails, an informational kiosk, trash receptacles, bathrooms, and picnic tables or benches. Secondary access would occur from Rangeland Road via a 1-mile public access easement (i.e., unpaved road) through RMWD property. This access route utilizes a portion of an existing unpaved road, but would also require 0.4 mile of new trail construction where the easement is adjacent to the Ramona Airport property. Signage and fencing would be installed to keep visitors on the trail and off RMWD and Ramona Airport properties.

Approximately 2,400 feet from the beginning of the north-south trail, a portion of the existing trail will be rerouted to avoid a severely eroded portion. The new trail will loop around the west side of a small hill and reconnect with the existing trail. This will require the addition of approximately 1,800 feet of new trail in order to bypass the eroded segment.

Southeast Portion

Because of existing deed restrictions and sensitive resources throughout the SE portion of the Preserve, most of this area is unavailable for public access. However, the southeastern tip (the former Hardy Ranch property) allows for connection to a future trail system associated with the proposed Cumming Ranch Development adjacent to the Preserve. If the Cumming Ranch Development, including trails, moves forward, there would be an approximately 0.3-mile trail connector segment within the SE portion. This segment is included in the Cumming Ranch Development Draft EIR and is not analyzed in this report.

Pathways

In addition to new trails, pathways are proposed along Highland Valley and Rangeland Roads located between the road paving and existing fencing within the right-of-way, with the pathway route as far from vehicle travel lanes as possible. Combined, the pathways total about two (2) miles in length. The Highland Valley Road pathway is approximately 0.8 mile and will be located on the north side of the road, so that users are adjacent to the Preserve boundary and on the same side of the road as the Oak Country II staging area. The Rangeland Road pathway is approximately 1.2 mile and will be located on the west side of the road. Location of the pathway on the west side of Rangeland Road will necessitate crosswalk signage and/or pavement marking for trail users to cross the road to reach the access point for the Northeast portion (via the RMWD easement). Only the northern 0.7 mile of pathway along Rangeland Road will be constructed initially. The additional pathways along Rangeland and Highland Valley Roads may be constructed during a later phase of the project.

Trail and Pathway Design

Existing Ranch Roads and Trails

Existing ranch roads that are currently used for vehicle access would be maintained to their current width. In the NW portion, the southern portion of Old Survey Route 97 off of the 0.5-mile road easement would be maintained at its current width of approximately 15 feet for vehicle access, for a distance of approximately one mile. The remainder of the road would be maintained to a trail width of four (4) feet.

In the NE portion, the existing east-west ranch road would be maintained to its current width as needed for vehicle access. The existing dirt road that extends north-south to the northern property boundary would be maintained to four (4) feet wide. Any new trail realignments to avoid eroded sections of the existing north-south dirt road would also be four (4) feet wide. Eroded sections of trails would be passively revegetated.

In the SE portion, the existing dirt road/trail in this area would be maintained to four (4) feet wide.

New Trails

Construction of new trails within the Preserve would meet the guidelines in the Ramona Community Trails and Pathways Plan and Community Trails Master Plan for Type C (Primitive) trails including four-foot tread width consisting of natural surface material, with brush management requirements of one foot on either side. The new trail segment associated with the

RMWD public access easement that connects the NE portion of the Preserve with Rangeland Road would follow the guidelines for Type C trails, except that it would be constructed the same width as the existing dirt road that it connects to (approximately ten feet wide).

New Pathway

Construction of the new pathways along Highland Valley Road and Rangeland Road would meet the guidelines in the Community Trails Master Plan for Type D pathways including 10-12 feet tread width consisting of decomposed granite, with brush management requirements only at the edge of the pathways.

Trail and Pathway Maintenance

Trails

Trails would be maintained at or near their original or intended standards, and maintenance includes various activities to keep trails in a safe, usable condition. Consistent with the Preserve RMP management directives, periodic assessments of trail conditions would be conducted to address surface material, drainage, vegetation clearing, signage, fencing, barriers and any necessary repairs. Trail maintenance activities would include mowing and brush removal, replacement of damaged signs, trail reconstruction and erosion control and stabilization.

Unauthorized trails will be blocked or covered with brush to camouflage them in order to discourage use, and to revegetate and protect sensitive habitats. Temporary trail closure may be necessary during maintenance. The trails would be marked with a temporary closed sign to ensure user safety.

Pathway

The San Diego County Department of Public Works (DPW) would be responsible for maintenance of designated pathways and would coordinate the maintenance with similar road maintenance activities involving clearing, grading, weed control, and maintenance of drainage control facilities. Pathway maintenance would include:

- Keeping the pathway free of weeds, brush, rocks, or other obstructions.
- Trimming trees and other vegetation to maintain a minimum vertical (overhead) clearance of 10 feet.
- Repairing erosion in a timely manner by grading, placement of new base material, or installing engineered drainage controls.

1.1.4 Other Infrastructure Improvements

Additional new infrastructure associated with the project includes a staging area, a ranger station/interpretive center/restroom facility, a maintenance building, a primitive amphitheatre, picnic areas, a viewing pavilion/visitor kiosk, utility trenching, and a refurbished horse riding arena in the NE portion of the Preserve (Figure 3). Each of these infrastructure improvements is described below:

- The existing house located southwest of an unpaved road extending west from Montecito Way would be refurbished or replaced to serve as a new ranger station/interpretive/restroom facility that meets federal Americans with Disabilities Act (ADA)-Architectural Barriers Act (ABA) accessibility guidelines. A two-space ADA accessible parking lot constructed of decomposed granite would be located adjacent to the house to provide parking for DPR staff. Nighttime security motion sensor lighting would be installed on the building.
- The existing barn structure would be removed and replaced by an approximate 40 foot x 30 foot x 12 foot-tall prefab metal maintenance building placed on a concrete foundation. Nighttime security motion sensor lighting would be installed on the maintenance building. No hazardous materials would be stored onsite.
- A primitive amphitheatre would be constructed northeast of the proposed maintenance building and would consist of a 0.1 acre area, with decomposed granite as the substrate and wooden bench seating in a semi-circle for up to 35 people. The amphitheatre would be ADA accessible. The amphitheatre would be used mostly for classroom education activities.
- Two shaded picnic area structures (each approximately 10 feet x 20 feet) would be constructed near the amphitheater. Another shaded picnic area structure (10 feet x 20 feet) would be constructed north of the proposed horse arena. These structures would be unpaved.
- A viewing pavilion/visitor kiosk, approximately 10 feet x 30 feet with a semi-shaded trellis structure, would be constructed on the hill in the vicinity of the existing residence and within existing disturbed/developed areas. The visitor kiosk would be accessible by pedestrian traffic only.
- Trenching of an existing water line would be completed to allow for a new water pipeline to be routed serving the existing residence on the hill. Trenching would originate at the previous trailer home location west of the existing residence.
- The project would also include restoration of the existing rodeo corral to a horse riding arena, located south of the proposed staging area. DPR is proposing to enter into a Memorandum of Agreement (MOA)/Memorandum of Understanding (MOU) with the Ramona Trails Association (RTA) where the County owns the property and maintains the connecting trails, and the RTA operates and maintains the horse riding arena. The refurbished arena would measure 130 feet x 317 feet, operate during Preserve hours, and vary in usage from 5-10 users per day on weekdays to 10-25 on weekends. The concrete blocks and metal and wood debris associated with the existing rodeo corral area onsite would be removed as part of the DPR initial stewardship and land maintenance.

1.2 Existing Conditions

1.2.1 Environmental Setting

Natural Setting

The natural setting within the project area is characterized by the Santa Maria Creek Valley, with the creek coursing from the southeastern end to the northwestern portion of the Preserve and ultimately emptying into the San Dieguito River Valley, located approximately one mile to the northwest. The northern half of the Preserve contains a foothill upland dissected by a number of small tributary drainages, mostly to Santa Maria Creek, that have created several narrow, smaller, steep canyons or ravines (see Figure 2). In the northwestern portion of this upland area, Santa Maria Creek has carved a steep canyon known as Bandy Canyon. The closest sources of fresh water are Santa Maria Creek and the San Dieguito River beyond the northwestern part of the Preserve.

The bedrock in the Preserve consists almost exclusively of Cretaceous granitic rocks, principally of the Woodson Mountain Granodiorite Formation, with a few outcrops of the San Marcos Gabbro and Cuyamaca Gabbro Formations. Also present along the floor of the Santa Maria Creek Valley are more recent sediments of Holocene and/or late Pleistocene age (T. Rogers 1965; Weber 1963). Within the Preserve, two general soil associations are principally represented: the Fallbrook-Bonsall association, and the Cienega-Fallbrook association.

The combination of soil, slopes and small drainages previously described currently supports a variety of vegetation habitats including coastal sage scrub, southern mixed chaparral, oak woodland, riparian, riparian oak forest, and non-native grassland, in addition to areas of disturbed habitat impacted by historic and modern development (Beauchamp 1986). Prehistorically, animal life around the project area undoubtedly included large to medium mammal species such as grizzly bear (*Ursus horribilis*) and black bear (*Ursus americanus*), mountain lion (*Felis concolor*), bobcat (*Lynx rufus*), mule deer (*Odocoileus hemionus*), coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), badger (*Taxidea taxus*), ringtail (*Bassariscus astutus*), raccoon (*Procyon lotor*), and striped skunk (*Mephitis mephitis*). Numerous species of smaller mammals were also present including jackrabbit (*Lepus californicus*), brush rabbit (*Sylvilagus bachmani*), cottontail rabbit (*Sylvilagus audubonii*), ground squirrel (*Spermophilus beecheyi*), pocket gopher (*Thomomys bottae*), and several species of mice and rats (Burt and Grossenheider 1976). Other animals included numerous predatory bird species such as red-tailed hawks (*Buteo jamaicensis*) and golden eagles (*Aquila chrysaetos*), and various amphibian and reptile species including a large variety of lizards and snakes as well as pond turtles (*Clemmys marmorata*) in the Santa Maria Creek drainage (Peterson 1961; Stebbins 1966).

1.2.2 Cultural Setting

Prehistoric Period

The following culture history outlines and briefly describes the known prehistoric cultural traditions. The approximately 10,000 years of documented prehistory of the San Diego region has often been divided into three periods: Early Period (San Dieguito tradition/complex);

Archaic Period (Milling Stone Horizon, Encinitas tradition, La Jolla and Pauma complexes); and Late Prehistoric Period (Cuyamaca and San Luis Rey complexes).

Early Period Complexes

The Early Period encompasses the earliest documented human habitation in the region. The “San Dieguito complex” is the earliest reliably dated occupation of the area. The assemblage of artifacts associated with the San Dieguito complex, first identified by Rogers (1939, 1945, 1966), has been studied and elaborated by Warren and True (1961), Warren (1967) and Moriarty (1969, 1987). The complex correlates with Wallace’s (1955) “Early Man Horizon,” and Warren subsequently defined a broader San Dieguito tradition (1968). The earliest component of the Harris Site (CA-SDI-149/316/4935B), located along the San Dieguito River approximately 18 km (11 miles) west of the Preserve, has been attributed by Warren (1966, 1967; Warren and True 1961) to be characteristic of the San Dieguito complex. Artifacts from the lower levels of the site include leaf-shaped knives, ovoid bifaces, flake tools, choppers, core and pebble hammerstones; several types of scrapers, crescents, and short-bladed shouldered points (Warren and True 1961; Warren 1966). Little evidence for the San Dieguito Complex/Early Man Horizon has been discovered north of San Diego County.

Some researchers interpret the San Dieguito complex as having a primarily, but not exclusively, hunting subsistence orientation (Warren 1967, 1968, 1987; Warren et al. 1998). Others see a more diversified San Dieguito subsistence system as possibly ancestral to, or as a developmental stage for, the subsequent, predominantly gathering oriented complex denoted as the “La Jolla/Pauma complex” (cf. Bull 1983; Ezell 1987; Gallegos 1985, 1987, 1991; Koerper et al. 1991).

Archaic Period Complexes

In the southern coastal region, the Archaic Period dates from circa 8600 years B.P. to circa 1300 years B.P. (Warren et al. 1998). During the Archaic Period, the La Jolla/Pauma complexes have been identified from the content of archaeological site assemblages dating to this period. These assemblages occur at a range of coastal and inland sites, which appears to indicate that a relatively stable, sedentary, hunting and gathering complex, possibly associated with one people, was present in the coastal and immediately inland areas of San Diego County for more than 7,000 years. La Jolla/Pauma complex sites are considered to be part of Warren’s (1968) “Encinitas tradition” and Wallace’s (1955) “Milling Stone Horizon.” The inland or “Pauma complex” aspect of this culture, as defined by True (1958), lacks shellfish remains, but is otherwise similar to the La Jolla complex and may, therefore, simply represent a non-coastal expression of the La Jolla complex (True 1980; True and Beemer 1982). The content of these site assemblages is characterized by manos and metates, shell middens, terrestrial and marine mammal remains, burials, rock features, cobble-based tools at coastal sites and increased hunting equipment and quarry-based tools at inland sites. Artifact assemblages can also include bone tools, doughnut stones, discoids, stone balls, plummets, biface points/knives, Elko-eared dart points, and beads made of stone, bone, and shell. Beginning approximately 5500 years B.P., and continuing during the latter half of the Archaic Period, evidence of hunting and the gathering and processing of acorns gradually increases through time. The evidence in the archaeological record consists of artifacts such as dart points and the mortar and pestle, which are essentially absent during the early Archaic Period. The initial and subsequently increasing use of these

technologies during the middle and late Archaic constitutes a major transition in how the prehistoric populations interacted with their environment in the southern coastal region. Warren et al. (1998) have designated the period of this shift, from ca. 4000 to 1300 B.P., as the Final Archaic Period.

Late Prehistoric Period Complexes

Similar to the subsistence changes noted above that occurred during the middle and late Archaic Period, the end of the Encinitas tradition/La Jolla/Pauma complexes and the beginning of the Late Prehistoric Period is marked by evidence for a number of new tool technologies and subsistence shifts in the archaeological record. Compared to those noted for the Archaic Period, however, those occurring at the onset of the Late Prehistoric Period are rather abrupt changes. The magnitude of these changes and the short period within which they took place seem to indicate a significant change in subsistence practices in San Diego County (ca. 1300 years B.P.). The changes include a shift from atlatl and dart to the bow and arrow, a reduction in shellfish gathering in some areas (possibly due to silting of the lagoons), and the storage of crops, such as acorns, by Yuman and Shoshonean peoples in the county area. In addition, new traits such as the production of pottery vessels and the cremation of the dead were introduced during the Late Prehistoric Period.

An explanation for at least some of these changes involves movements of people during the last 2,000 years. By 2,000 years ago, Yuman-speaking people occupied the Gila and Colorado River drainages of western Arizona (Moriarty 1968) and were apparently migrating westward. Moriarty (1966, 1967) has suggested a preceramic Yuman phase, as evidenced by his analysis of materials recovered from the Spindrift site in La Jolla. Based on a limited number of radiocarbon samples, Moriarty concluded that preceramic Yumans penetrated into, and occupied, the San Diego coast circa 2,000 years ago, and that by 1,200 years ago ceramic technology had diffused from the eastern deserts. These Yuman speakers may have shared cultural traits with the people occupying eastern San Diego County before 2000 years B.P., but their influence is better documented throughout the county area after 1300 years B.P., with the introduction of small arrow points, ceramics, use of Obsidian Butte obsidian, and the practice of cremation of the dead.

During Late Prehistoric times, the Preserve would have been within the area commonly associated with the archaeologically-defined Cuyamaca complex which is associated with the Hokan-based, Yuman-speaking peoples (Diegueño/Kumeyaay). Cuyamaca complex sites generally contain small projectile points, with both Cottonwood Triangular style points and Desert Side-notched points (Pignuolo 2001). Ceramics, while present during the Late Prehistoric period throughout San Diego County, are more common in the southern or Cuyamaca complex portions of San Diego County, where ceramic vessels occur earlier in time and appear to be somewhat more specialized in form. A variety of vessel types, along with rattles, straight and bow shaped pipes, and effigies, have been found within San Diego County. Cuyamaca complex sites are characterized by cremations where the ashes were often placed in special burial urns. The majority of the prehistoric resources within the Preserve are associated with the Late Prehistoric Ipai/Kumeyaay as evidenced by the projectile point types, the presence of ceramics, bedrock mortars, and other culturally and temporally diagnostic materials. In addition, the

radiocarbon dates from excavations at the village of Pa'mu extend back almost 2,000 years (Carrico and Cooley 2005).

Historic Period

By common convention, prehistory ended and historic cultural activities began within what is now San Diego County between the late 1500s and mid-1770s. These cultural activities provide a record of Spanish, Mexican, and American rule, occupation, and land use. An abbreviated history of this area is presented to provide a background on the presence, chronological significance, and historical relationship of cultural resources within the study area. A full discussion can be found in Case and Carrico (2010).

Ethnographically, the Preserve falls within Northern Diegueño (Kumeyaay/Ipai) territory. The Kumeyaay are traditionally considered to be a collector/hunting society characterized by central-based nomadism. Prior to Spanish colonization the Santa Maria Valley was used by the Ipai/Kumeyaay as a winter village (known as Pa'mu) and as an extensive resource procurement area where native plants were harvested and animals were hunted. As documented in the cultural resources inventory report for the Preserve (Case and Carrico 2010), numerous Ipai place names have been identified within and in the region surrounding the Preserve.

Spanish presence in the Santa Maria Valley (Ramona) began in 1778 when a military expedition was sent to the powerful Ipay (northern Kumeyaay) village of Pa'mu to castigate what were perceived to be potential insurrectionists (Bancroft 1884:314-316; LeMenager 1989:17-18; Maggiano 1990). Spanish soldiers punished the Ipay severely; Jose Francisco Ortega, comandante of the San Diego Presidio, sent a contingent of soldiers to harass the *rancheria*, enabling the Spanish to regain control of the valley (LeMenager 1989:17-18; Maggiano 1990; Carrico 1992:17).

In 1818, the Santa Ysabel mission outpost (*asistencia*) was established several miles north of the Santa Maria Valley near the present day community of Santa Ysabel. After 1821, California came under Mexican rule, but Spanish culture and influence remained as the missions continued to operate as they had in the past, and laws governing the distribution of land were also retained for a period of time. During the secularization process of Mission San Diego in 1833, a Mexican soldier named Narcisco Botello received the Santa Maria land grant. Unable to successfully ranch the land, Botello abandoned it, and in 1843 the grant passed to Jose Joaquin Ortega and his son-in-law, Captain Edward Stokes.

Over the next 30 years the land grant stayed in the Stokes family and Edward Stokes' three sons, Alfredo, Adolphus (Adolfo), and Eduardo built several adobes on the Santa Maria Rancho including the Adolfo Stokes adobe that still stands east of the intersection of Highway 78 and Magnolia, approximately 2 miles east of the Preserve (Bowen and Ransom 1975). Another adobe, that is often noted as a Stokes' adobe but was actually the Etcheverry Santa Maria adobe, which was destroyed several years ago, was located north of Highway 67 and west of Hope Street on a slight rise immediately east of a present day chicken ranch. This adobe was where Kearny camped before moving on to the Oak Grove camp. The *carreta* (cart) path that Kearny followed across the extreme northeastern portion of the Preserve can be associated with the

Mexican period as a transportation corridor that linked Santa Ysabel and San Pasqual by way of the Santa Maria Valley.

Mexico's defeat in the Mexican-American War in 1848 initiated the American period, when Mexico ceded California to the United States under the Treaty of Guadalupe Hidalgo. Subsequently, land ownership by the Mexicans living in California became a matter of considerable legal wrangling.

In 1872, having purchased or inherited the interests of his brothers, Adolfo Stokes sold all but 1,000 acres for \$40,000 to Juan Arrambide. Stokes retained the 1,000 acres in Valle de los Amigos, now known as Goose Valley (east-northeast of the Preserve, where his adobe house still stands.). Arrambide joined forces with French immigrant Bernardo Etcheverry and developed the valley in fruit orchards, vineyards, and grain fields, and ran a prosperous sheep operation on several thousand acres in Santa Maria Valley (LeMenager 1989). By the late 1870s, Etcheverry had 12,000 head of sheep grazing in the valley. The operations of Arrambide and Etcheverry were probably the first intensive ranching activities to affect the vegetation and landscape of the valley (Beck 2004).

The 1880s and 1890s brought a steady flow of settlers to southern California, including the Santa Maria Valley with its little village of Ramona. During this time the Santa Maria land grant was sold off in large and small parcels to various land speculators, mostly from San Francisco, as well as a few homesteaders who tried their hand at ranching. Throughout the early 1900s the area gradually grew with an emphasis on ranching, horse stables, bee "farming," and many turkey ranches. Other early settlers like Augustus Barnett settled in the San Vicente Valley and helped to establish the newly subdivided settlement of Ramona (then Nuevo) whose town hall he helped build in 1893 (LeMenager 1990:102-3). For several decades from 1930 to the early 1970s, Santa Maria Valley and Ramona itself were known as the "Turkey Capital" of the world.

Gradually the farming and ranching lifestyle of the post-Civil War period of the late nineteenth century and early twentieth century faded away with the added influence of military development, beginning in 1916-17 during World War I (Starr 1973). In the last 70 years, urban development has burgeoned along the coast and inland valleys. In recent decades the Ramona area has seen a spike in residential population density (Beck 2004; Pryde and Stutz 2004:240).

Beginning as early as 1846 and likely extending into prehistoric times, the Santa Maria Valley and Valle de Pamo, and therefore portions of the Preserve study area, served as important travel corridors in the region. Several historic trails and roads are known to have passed through the Preserve.

Ethnographic Background

A detailed ethnographic history of the Preserve can be found in Case and Carrico (2010). The following is excerpted from that document.

The project site is situated within the traditional territory of the people known to the Spaniards as the Diegueño, a term later adopted by anthropologists (Kroeber 1925) and further segmented into

the southern and northern Diegueño in an attempt to describe the Yuman-speaking people of San Diego County.

The Preserve study area is well within the Northern Diegueño (Kumeyaay/'Iipay) territory as understood by the Spaniards, and most subsequent chroniclers and researchers (e.g., Luomala 1978:593). The Kumeyaay are traditionally considered to be a collector/hunting society characterized by central-based nomadism.

While a large variety of terrestrial and marine food sources were exploited, emphasis was placed on acorn procurement and processing, as well as the capture of rabbit and deer. Shippek (1989; 1963) has strongly suggested that the Kumeyaay, or at least some bands of the Kumeyaay, were practicing proto-agriculture at the time of Spanish contact. While the evidence is problematic, the Kumeyaay were certainly adept land and resource managers with a history of intensive plant husbandry.

As with most hunter-gatherer societies (Service 1966:33), Kumeyaay social organization was formed in terms of kinship. More specifically, the Kumeyaay were a patrilocal type of band organization with band exogamy (marriage outside of one's band) and virilocal marital residence (the married couple integrates into the male's band). The band is often considered as synonymous with a village or *ranchería*, which is a political entity. Almstedt (1974:45), following up on the work of White with the Luiseño, has suggested that the term *ranchería* be applied to both a social and geographical unit, as well as to the particular population and territory held in common by a native group or band. She also stressed that the territory for a *ranchería* might comprise a 30 square mile area. Given the extent of the archaeological resources within the Preserve study area generally, and the old Oak Country development parcel specifically, the concept of an 'Iipay *ranchería* within the Preserve makes far more sense than approaching the large number of Late Period sites as disassociated "camps" or work stations. Instead the sites and resources should be visualized as a large settlement with intrasite variances in function and use.

Many households would constitute a village and several villages were part of a much larger social system usually referred to as a consanguineal kin group (*cimuL*). The *cimuL* is typically an exogamous, multilocal, patrilineal, consanguineal descent unit, often widely dispersed in local lineage. The members of the *cimuL* do not intermarry because of their presumed common ancestry, but they maintain close relations and often share territory and resources (Sahlins 1968:23; Service 1971:105-106; Luomala 1963:287-289). In the case of the *ranchería* of Pa'mu and its fall/early winter village *Tekemuk* to the east, they would share strong relationships with the *ranchería* of San Pasqual (*Awi-kwakalkuL*, sometimes glossed or spelled as *Ahmakattkatl*) to the northwest and with Bernardo (*Apta*) to the west and probably with settlements of unknown names where San Vicente Reservoir and the Boulder Oaks Preserve are today.

Territorial divisions among Kumeyaay residential communities are normally set by the circuit of moves between villages by *cimuLs* in search in food. As Spier (1923:307) noted, the entire territory was not occupied at one time, but rather the communities moved between resources in such a manner that in the course of a year all of the recognized settlements may have been occupied. While a *cimuL* could own, or more correctly control, a tract of land with proscribed rights (Luomala 1963: 285; Spier 1923: 306), no one from another *cimuL* was denied access to

the resources of nature since no individual owned the resources; they were to be shared. It is likely then that the Valle de Pamo and Santa María Valley as a whole could have been shared by groups closely aligned with the people of *Pa'mu* and *Tekemuk* -- located at present-day Mesa Grande, approximately 10 miles northeast of the Preserve (Harrington 1925-1927).

The Kumeyaay practiced many forms of spiritualism with the assistance of shamans (*kuessay*) and *cimuL* leaders. Spiritual leaders were neither elected nor inherited their position, but achieved status because they knew all the songs involved in ceremonies (Shipek 1991) and had an inclination toward the supernatural. Important Kumeyaay ceremonies included male and female puberty rites, the fire ceremony, the whirling dance, the eclipse ceremony, the eagle dance and the cremation ceremony, as well as the yearly mourning ceremony (Spier 1923:311-326). The primary ceremonial direction among the Kumeyaay is east, with rock art and entrances to ceremonial enclosures usually facing this direction (Kroeber 1925:717). The Kumeyaay are the only California tribe known to possess a color-direction system where white represents the east, green-blue the south, black the west, and red the north (Kroeber 1925:717).

1.2.3 Records Search Results

The present document is based on the results of an inventory prepared for the Preserve in 2010 (Case and Carrico 2010). That report presents detailed information on past research, a records search, and field studies for all portions of the Preserve. Pertinent information is summarized here.

Previous Studies

The results of that study indicate that fifty-one cultural resources studies are on record at the California Office of Historic Preservation's South Coastal Information Center, or at ICF International, as having occurred inside or within one-quarter mile of the Preserve. Eighteen of these studies occurred within a portion of the Preserve. Some of the studies involved only overview research for large areas (without field survey) that encompassed a portion of the Preserve. Only two of the cultural resource studies that have occurred within the Preserve have included subsurface investigations. Most recently, three major studies covered almost ninety percent of the Preserve; these include the Phase I, Extended Phase I, and Phase II programs conducted in the southwestern portion for the Oak Country Estates project (Carrico and Cooley 2005), the survey and inventory constraints program conducted in the northeast portion of the Preserve for the Davis-Eagle Ranch property (Carrico 2003) and the 2010 Phase I survey covering the NW and SW portions of the Preserve (Case and Carrico 2010).

Previously Recorded Sites In the Study Area

A total of 229 cultural resources, including 211 sites and 18 isolated finds, were identified within the Preserve. The 211 sites consist of 171 prehistoric sites, six multi-component, twenty-nine historic and five sites of unknown age. The prehistoric resource types on the Preserve include large and small habitation sites, milling stations, quarries, lithic scatters, rock alignments and enclosures, and a complex of sites that represent the prehistoric and ethnographic village of *Pa'mu*. Historic resources include standing structures, roadways, rock features, a mine, a dam, survey monuments, WWII era bombing targets, and trash scatters. Ninety-eight other cultural resources have been previously recorded within a one-quarter mile radius of the Preserve.

1.3 **Applicable Regulations**

The current project falls under County and state legislative jurisdiction. The lead reviewing agency is the County of San Diego. California state law regarding cultural resources is primarily embodied in Section 15064.5 of the California Environmental Quality Act (CEQA), as amended. CEQA establishes principles for cultural resource preservation and criteria for the identification of important resources. Local implementation of CEQA is accomplished by County ordinances including Section 396.7 of the San Diego County Administrative Code establishing the San Diego County Local Register of Historical Resources, and through the County of San Diego Resource Protection Ordinance, a compilation of ordinances nos. 7968, 7739, and 7631. The current evaluation study is intended to comply with and fulfill the requirements under CEQA and County of San Diego for the protection of Historical Resources eligible for the Local Register or for protection under the County's Resource Protection Ordinance (RPO).

1.3.1 **California Environmental Quality Act**

The California Environmental Quality Act (CEQA) requires public agencies to evaluate the implications of their project(s) on the environment and includes significant historic resources as part of the environment.

According to CEQA, a project that causes a *substantial adverse change* in the significance of a *historical resource* or a *unique archaeological resource* has a significant effect on the environment (CEQA Guidelines 15064.5, Pub. Res. Code section 21083.2). CEQA defines a *substantial adverse change* as:

- Physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired; or
- Demolition or material alteration of the physical characteristics that convey the resource's historical significance and justify its designation as a *historical resource*

Public agencies must treat any cultural resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant (Title 14 CCR, Section 15064.5). A historic resource is considered significant if it meets the definition of *historical resource* or *unique archaeological resource*. Criteria for evaluation are discussed in Section 2.

1.3.2 **San Diego County Local Register of Historical Resources**

Section 396.7 of the San Diego County Administrative Code establishes the San Diego County Local Register of Historical Resources. In Section II the stated purpose of "the Local Register is an authoritative listing and guide to be used by local agencies, private groups, and citizens in identifying historical resources within the County. In addition, the listing shall also be used as a management tool for planning, and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change."

The term historical resource is used in the Local Register for all types of individual prehistoric or historic resources and the term historic district applies to a collectively related group of historical resources within a contiguous geographic area. Criteria for evaluation are discussed in Section 2.

1.3.3 San Diego County Resource Protection Ordinance (RPO)

Under the County of San Diego Resource Protection Ordinance (compilation of ordinances nos. 7968, 7739, and 7631), significant resources are defined as follows:

Significant Prehistoric or Historic sites: Location of past intense human occupation where buried deposits can provide information regarding important scientific research questions about prehistoric or historic activities that have scientific, religious, or other ethnic value of local, regional, State, Federal importance. Such locations shall include, but not be limited to: any prehistoric or historic district, site, interrelated collection of features or artifacts, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places or the State Landmark Register; or included or eligible for inclusion, but not previously rejected, for the San Diego County Historical Site Board List; any area of past human occupation located on public or private land where important prehistoric or historic activities and/or events occurred; and any location of past or current sacred religious or ceremonial observances protected under Public Law 95-341, such as burial(s), pictographs, petroglyphs, solstice observatory sites, sacred shrines, religious ground figures, and natural rocks or places which are of ritual, ceremonial, or sacred value to any prehistoric or historic ethnic group.

For prehistoric or historic sites identified as significant under RPO criteria, restrictions to use include:

Development, trenching, grading, clearing and grubbing, or any other activity or use damaging to significant prehistoric or historic site lands shall be prohibited, except for scientific investigations with an approved research design prepared by an archaeologist certified by the Society of Professional Archaeologists [*sic*].

If a prehistoric or historic resource is identified as RPO significant, then the following may be required as a condition of approval of the discretionary permit:

1. Apply open space easements to portions of the project site that contain sensitive lands;
2. Rezone the entire project site through the application of a special area designator for sensitive lands; or
3. Other actions as determined by the decision-making body.

2.0 GUIDELINES FOR DETERMINING SIGNIFICANCE

2.1 CEQA Guidelines

CEQA requires public agencies to evaluate the implications of their project(s) on the environment and includes significant historic resources as part of the environment.

The term *historical resource* includes, but is not limited to any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California Public Resource Code (PRC 5020.1(j)). Historical resources may be designated as such through three different processes:

1. Official designation or recognition by a local government pursuant to local ordinance or resolution (PRC 5020.1(k))
2. A local survey conducted pursuant to PRC 5024.1(g)
3. The property is listed in or eligible for listing in the National Register of Historic Places (NRHP) (Public Resources Code section 5024.1(d)(1))

The process for identifying historical resources is typically accomplished by applying the criteria for listing in the California Register of Historical Resources (CRHR) (Title 14 CCR, Section 4852), which states that a historical resource must be significant at the local, state, or national level under one or more of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. It is associated with the lives of persons important in our past.
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values.
4. It has yielded, or may be likely to yield, information important in prehistory or history.

To be considered a *historical resource* for the purpose of CEQA, the resource must also have integrity, which is the authenticity of a resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance.

Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling and association. It must also be judged with reference to the particular criteria under which a resource is eligible for listing in the CRHR (California Code of Regulations title 14, Section 4852(c)).

A *unique archaeological resource* is defined in section 21083.2 of the Public Resources Code as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and for which there is a demonstrable public interest
- Has a special and particular quality such as being the oldest of its type or the best available example of its type
- Is directly associated with a scientifically recognized important prehistoric or historic event or person

In most situations, resources that meet the definition of a unique archaeological resource also meet the definition of *historical resource*. As a result, it is current professional practice to evaluate cultural resources for significance based on their eligibility for listing in the CRHR. For the purposes of this CEQA cultural resources study, a resource is considered significant if it meets the CRHR eligibility (significance and integrity) criteria. Individual resource assessments of eligibility are provided in this report.

2.2 County Guidelines

Section V, subsection (b), of Section 396.7 of the San Diego County Administrative Code specifies the following criteria for evaluating the significance of historical resources. A historical resource must be significant at the local level under one or more of the following four criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of San Diego County's history and culture heritage;
2. Is associated with the lives of persons important to the history of San Diego County or its communities;
3. Embodies the distinctive characteristics of a type, period, San Diego County region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded or may be likely to yield, information important in prehistory or history.

Under subsection Section V(c), resource integrity is addressed. Integrity is the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance.

3.0 ANALYSIS OF PROJECT EFFECTS

3.1 Methods

3.1.1 Field Methods

The current study did not involve original fieldwork, but rather is based on the results of an inventory conducted for the entire Preserve (Case and Carrico 2010). The inventory report compiled information from several separate studies, including studies of the NE (Carrico 2003) and SW (Carrico and Cooley 2005) portions undertaken prior to the establishment of the Preserve, as well as original field studies for the NW and SE portions. The report also includes the results of a records search that was undertaken for the Preserve and a ¼ mile buffer around the Preserve.

3.1.2 Laboratory and Cataloging Procedures and Curation

Not applicable to the current study.

3.1.3 Native American Participation and Consultation

Native American consultation was conducted on multiple occasions during various phases of the investigation and included field meetings with members of the San Pasqual Band, the Mesa Grande Band, and the Santa Ysabel Band, as well as with Carmen Lucas, Kwaaymii Laguna Band. Specific to the proposed Preserve, a letter was sent to the Native American Heritage Commission (NAHC) on April 24, 2009 requesting a review of the Sacred Lands files. A response letter from Mr. Dave Singleton of the NAHC, dated April 29, 2009, was received via fax on April 30, 2009. The search of the Sacred Lands files by the NAHC did indicate the presence of Native American cultural resources in or within one-half mile of the Preserve project area.

The NAHC response also included a list of local Native American contacts. On June 5, 2009, letters were sent to the 12 listed Native American contacts requesting further consultation and participation in the cultural resources study. One of the contacts listed by the NAHC, Mr. Clinton Linton of the Santa Ysabel Band of Diegueño Indians, responded and was retained contractually to provide Native American monitoring services for the field survey through his company Red Tail Monitoring & Research. No responses have been received from the other 11 listed contacts.

During the field survey, a qualified monitor from Red Tail Monitoring & Research was present each day. Mr. Linton was also requested to provide input on Kumeyaay concerns and information regarding prehistoric resources present within the Preserve. At the completion of the field surveys, Mr. Linton submitted a letter report dated October 5, 2009 (included in Case and Carrico 2010, Appendix B) that listed recommended actions DPR should take to mitigate impacts to Native American cultural resources in the Preserve.

In addition, a Native American outreach meeting was held by DPR in April 2010. Native American tribal representatives included Mr. Clinton Linton of Red Tail Monitoring and a Kumeyaay representative; Mr. Luis Guassac, Board Member, Kumeyaay Diegueño Land Conservancy; and Mr. Dave Toller, Tribal Councilman, San Pasqual Band of Indians. The

purpose was to solicit input from Native American representatives on the proposed trail system and identify any Native American resources of concern.

3.2 Results

The following discussion presents the resources identified as part of this inventory and is organized according to the four components of the Project, including: 1) the Preserve RMP, 2) the Preserve VMP, 3) the proposed multi-use trail system, and 4) the proposed infrastructure improvements.

3.2.1 Preserve Resource Management Plan

The Preserve RMP is a document that addresses management of all of the Preserve's resources, including cultural resources, in a manner that ensures protection of those resources. Since the Preserve RMP applies to the Preserve as a whole, impacts could occur to any of the 229 known cultural resources located within the Preserve, as well as unidentified resources including Native American human remains. These could include impacts caused by the installation and maintenance of signage, fencing and gates, some of which may be related to the preserve multi-use trail system, discussed below. The Preserve's resources are described in detail in the inventory report (Case and Carrico 2010).

The Preserve RMP also allows for the development of interpretive and educational materials for the public. These materials could include informational brochures, signage along trails or at trail heads, or educational programs. The Preserve cultural resources inventory report (Case and Carrico 2010) identifies opportunities for public education and outreach. Themes for educational opportunities include: 1) the proposed ethnographic village of *Pa'mu* Archaeological District, 2) ethnographic Kumeyaay place names, 3) ethnographic Kumeyaay lifeways, 4) the historical Spanish raid on *Pa'mu*, 5) historical transportation routes in the Preserve and vicinity, 6) historical ranching activities, and 7) the World War II training facility.

The primary impact to cultural resources that might arise through the development of educational and interpretive materials is the unauthorized disclosure of sensitive information on resource location, which could lead to unauthorized visitation, looting, and vandalism. As such, any of the cultural resources in the Preserve could be impacted by the development of these materials, but specific resources related to the above themes would be particularly sensitive.

3.2.2 Preserve Vegetation Management Plan

Like the Preserve RMP, the management actions proposed in the Preserve VMP could also impact any of the 229 known cultural resources located in the Preserve. Further, one specific aspect of the Preserve VMP involves restoring portions of an existing dirt road that will be closed to public access. Located in the NW portion of the Preserve, the road itself is an archaeological site, P-37-030845, known as County Survey Road 97. It consists of several branches of related wagon trails (Figure 4a – Confidential Appendix). One loop and one spur of this trail will be restored. To avoid direct impacts to the resources, these segments should be passively restored. Fire management is another aspect of the Preserve VMP that could impact cultural resources, especially if it involves vegetation removal or off-road use of vehicles or other heavy equipment.

3.2.3 Preserve Multi-use Trail System

In contrast with the preceding components of the project (Preserve RMP and VMP), the multi-use trail system has the potential to impact specific, identifiable resources. Those resources are discussed here, according to trail type (existing trails, new trails, and pathways). Detailed descriptions and site records for the resources can be found in Case and Carrico (2010).

Existing Trails

Existing trails will be utilized in the NW and NE portions of the Preserve. Five cultural resources are intersected by existing trails. Another resource may be impacted by increased pedestrian traffic. All six resources are located in the NW portion of the Preserve (Figures 4a and 4b – Confidential Appendix). These are listed in Table 1 and are discussed below.

Of the six resources intersected by existing trails, three are prehistoric sites, all of which are minor bedrock milling sites consisting of one to several outcrops of rock with milling features. The two historic resources consist of a feature with metal anchor cables, and County Survey Road 97, discussed above. In fact, much of the proposed trail in the NW portion follows Survey Road 97. Site CA-SDI-16175/H is a multicomponent site consisting of a major prehistoric habitation site and a house foundation.

One additional prehistoric resource, CA-SDI-19558, while not located along the trail, has been identified by a Native American representative as a significant and sensitive resource. He has requested that split rail fencing be used in the vicinity of the site to discourage visitors from deviating from the trail to visit the site.

No cultural resources occur along existing trails in the NE and SE portions of the Preserve.

Table 1. Cultural Resources along Existing Trails

Site Trinomial CA-SDI-	Primary No. P-37-	Portion	Site Description
16175/H	024393	NW	Multi-component Major Prehistoric Habitation Site and House Foundation
19532	030767	NW	Minor Bedrock Milling Site
19558*	030793	NW	Major Habitation Site
19559	030794	NW	Minor Bedrock Milling Site
19563	030798	NW	Minor Bedrock Milling Site
	030836	NW	Twelve-strand metal cable anchors affixed into bedrock for some form of conveyance that crossed Santa María Creek
	030845	NW	County Survey Road 97

*Not on trail but should be protected from unauthorized visitation.

New Trails

New trails will be created in the NW and NE portions of the Preserve. In addition, new trails will be constructed on non-Preserve land, with one segment connecting the NE portion to Rangeland Road, and an optional second segment connecting to a proposed RMWD bridge crossing in the NW portion. New trail segments have been designed to avoid cultural resources where feasible.

On the Preserve itself, no cultural resources will be directly impacted by the new trails. In the NW portion, along a west-east trending stretch of new trail running along the southern border of this portion and connecting existing trail segments, the proposed trail was routed to avoid a series of prehistoric resources located within fifty feet of the trail. These resources are shown in Figures 4a and 4b in the Confidential Appendices. The locations of the proposed bridge and associated temporary construction staging area were also chosen to avoid known cultural resources. As currently proposed, the trail segments and proposed bridge in this area should not impact cultural resources. However, Figure 4b shows that there are many recorded resources within 50 feet of the new trail and bridge alternative. Any adjustments to the proposed route would need to take these resources into consideration.

In the same area, an alternative trail and bridge crossing is under consideration. Instead of locating the crossing on the Preserve, this would involve the construction of a new trail that would connect with a proposed road and bridge on RMWD land (Figure 4b – Confidential Appendix). If this alternative is used, the bridge crossing on the Preserve will not be constructed. This optional trail segment that connects to the road on RMWD property will also avoid known cultural resources. Again, however, Figure 4b shows that there is one recorded resource within 50 feet of the new trail segment, and any adjustment to the proposed route would need to take this resource into consideration.

A new trail segment will be constructed in the NE portion of the Preserve (Figure 6 – Confidential Appendix). This new trail segment will bypass a heavily eroded portion of the existing dirt road. The new trail will avoid the one known cultural resource in the immediate area, which occurs along the existing road near the northern terminus of the new trail segment (Figure 6 – Confidential Appendix). This resource is CA-SDI-16575, a burned corral and associated scatter of historical glass and ceramic fragments.

The final new trail segment occurs in the central portion of the Preserve, where a trail will connect the NE portion of the Preserve with a new pathway along Rangeland Road. This trail will occur on non-Preserve land along a RMWD easement (Figure 5 – Confidential Appendix). One cultural resource is recorded along the proposed route (Table 2). This resource is CA-SDI-10270, a minor bedrock milling site. Because it is located off the Preserve, this area was not surveyed as part of the Preserve inventory. Available information, including location, was derived from records search data. As such, the location of the resources should be confirmed through a field check.

No cultural resources occur along existing trails in the SE portion of the Preserve.

Table 2. Cultural Resources along New Trails

Site Trinomial CA-SDI-	Primary No. P-37-	Portion	Site Description
10270		Non-Preserve	Minor Bedrock Milling Site

New Pathways

Based on existing records search information, no cultural resources were identified along the proposed corridors for the new pathways outside the Preserve boundary along the west side of Rangeland Road and the north side of Highland Valley Road.

3.2.4 Infrastructure Improvements

Several known cultural resources occur in the areas of the proposed infrastructure improvements (Table 3 and Figure 6 – Confidential Appendix). Improvements consist of a staging area, ranger station/interpretive center/restroom facility, a maintenance building, a primitive amphitheatre, picnic areas, a viewing pavilion/visitor kiosk, and a horse arena, all in the NE portion of the Preserve.

Two cultural resources are present in the area of the proposed staging area and ranger station. These are CA-SDI-16579 and P-37-025102. CA-SDI-16579 is a sparse historic trash scatter located at the intersection of a primary dirt road and a dirt drive leading to the proposed staging area and ranger station. It consists of a minimal amount of diagnostic glass, ceramic and metal in an area that has been impacted by grading. Most of the resources fall outside the staging area. P-37-025102 is the ranch complex, consisting of a residence, barn, horse arena, and outbuilding.

A third resource, CA-SDI-16628, a large bedrock milling site, is located in the vicinity of the proposed pavilion and lookout.

Table 3. Cultural Resources Associated with Preserve Improvements

Site Trinomial CA-SDI-	Primary No. P-37-	Portion	Site Description
16579	025040	NE	Sparse historic trash scatter
	025102	NE	Single story wood-frame house with a side-gable roof and decorative endboards of no distinct period or type, built prior to 1954. Numerous associated outbuildings, wooden corral, wooden wagon, and ornamental trees – the Davis-Eagle Ranch complex
16628	025089	NE	Major Bedrock Milling Site

4.0 INTERPRETATION OF RESOURCE IMPORTANCE AND IMPACT IDENTIFICATION

4.1 Resource Importance

Of the 229 resources that could be impacted by implementation of the Preserve RMP and Preserve VMP, previous studies have tested and evaluated only 40 of the archaeological sites. Thirteen have been found significant, including 10 that have been found significant under the County's RPO. Twenty-seven sites were evaluated as not significant, and the 18 isolates are also not considered significant. However, five (5) of the resources evaluated as not significant would be part of a proposed archaeological district related to the ethnographic village of *Pa'mu*. As such, they, too, would be considered significant, as contributing elements to the district. The remaining 171 cultural resources have not been formally evaluated and are therefore considered significant.

Of the 229 resources in the Preserve, 11 resources have been identified that might be impacted by specific features of the Preserve PAP, including the trail system, trail restoration, and infrastructure improvements. These are listed in Table 4, with their significance status, if known. Only two of these resources have previously been evaluated, including County Survey Road 97 (P-37-030845), found significant, and the ranch complex (P-37-025102), found not significant. The remaining resources have not been evaluated.

CA-SDI-16579, a sparse historic trash scatter, can be evaluated based on available information concerning its location and characteristics. This site is a sparse scatter of nondiagnostic glass, ceramic, and metal fragments, located at the intersection of two dirt roads that have been used for decades. The resource does not appear to contain a subsurface component, and the surface artifacts do not contain any data potential beyond that recorded in the site record. In addition, the entire resource is located in the graded portion of a dirt road and is highly disturbed. Finally, the resource likely is associated with the nearby ranch complex, P-37-025102, which has been determined ineligible for the CRHR. For these reasons, it is recommended that CA-SDI-16579 is not significant according to CRHR or County of San Diego significance criteria.

Table 4. Significance of Cultural Resources Associated with Trails and Improvements

Site Trinomial CA-SDI-	Primary No. P-37-	Portion	Significance
10270		Non-Preserve	Unevaluated
16175/H	024393	NW	Unevaluated
16579	025040	NE	Recommended ineligible
16628	025089	NE	Unevaluated
19532	030767	NW	Unevaluated
19558	030793	NW	Unevaluated
19559	030794	NW	Unevaluated
19563	030798	NW	Unevaluated
	025102	NE	Determined ineligible
	030836	NW	Unevaluated
	030845	NW	RPO, CRHR, and NRHP significant

4.2 Impact Identification

4.2.1 Preserve RMP and VMP

A range of potential impacts might arise from implementation of the project. These include broad scale impacts (meaning they could occur throughout the Preserve) related to Preserve VMP and Preserve RMP management directives, as well as more specific impacts related to trail construction, maintenance and related activities. Because implementation of the Preserve RMP and VMP could result in impacts to cultural resources, these potential impacts must be considered and corresponding mitigation measures developed (Mitigation Measures 1, 4 and 5).

As a component of the Preserve VMP, fire management activities, particularly those involving vegetation removal, ground disturbing activity, or use of vehicles or heavy equipment, do have the potential to impact cultural resources. For this reason, prior to any fire management activity, the location of known cultural resources should be reviewed in order to develop a strategy to avoid the resources (Mitigation Measure 1). Installation of signage, fencing, or gates placed along the trails also would involve ground disturbing activity (i.e., digging of post holes), and so would have the potential to impact cultural resources. To avoid impacts to cultural resources, any trail signage or fencing should be located in areas safely outside the boundaries of known cultural resources (Mitigation Measure 2).

The Preserve RMP also allows for the development of interpretive and educational materials. To avoid any impacts to cultural resources, these materials should be developed in such a way that information on the location of the resources is not released to the public. For prehistoric and ethnographic resources, interpretive and educational materials should be developed in coordination with Native American representatives to ensure that other sensitive information is not disclosed as well.

Many other activities in the Preserve RM and Preserve VMP likely will not impact cultural resources. For example, the Preserve VMP indicates that habitat restoration will be passive, and so would not have direct impacts on cultural resources. Further, in the Preserve VMP, mechanical vegetation removal that might impact cultural resources is not anticipated.

4.2.2 Preserve Multi-use Trail System

Improvements to existing trails will be minimal and will be limited to future road maintenance—which will confine activities to the existing trails and will not involve ground disturbing activity—and erosion control. Impacts related to continued use of the existing roads/trails would not differ in kind from the impacts resources along the trails have already experienced. For this reason, it is not anticipated that those resources located in areas of existing trails will suffer direct impacts from trail use or maintenance.

It is possible, however, that resources in the vicinity of the existing trails might be impacted by visitor-caused damage, such as looting or vandalism. It is important to note that in discussions with Native American representatives, none of the representatives identified this as a particularly pressing concern for the resources in the vicinity of the trails. Instead, more concern was expressed for resources that might have sacred significance. Most of the prehistoric resources in the vicinity of the trails are small milling stations with few associated artifacts. The exception is CA-SDI-19558, a large habitation site. It was identified as a sensitive resource that, because of

its inviting geographical location, might draw unwanted visitor attention. Also, any of the resources located along the existing trails may contain artifacts that could be collected by visitors. For these reasons, mitigation measures for both of these situations will need to be implemented (Mitigation Measure 3).

Unlike existing trail reuse, new trail construction does have the potential to directly affect cultural resources along the route of the trail. The construction of a crossing over Santa Maria Creek could also have severe impacts to any cultural resources located within the proposed bridge construction footprint or in the temporary construction staging area (Mitigation Measure 2).

Importantly, however, all new trail segments within the boundaries of the Preserve, including the proposed bridge crossing and temporary construction staging area, as well as the alternative trail segment that would connect to a road and bridge crossing on RMWD property, were located in areas that would avoid cultural resources. As such, it is not anticipated that construction of new trail segments will impact cultural resources. An exception to this is a single cultural resource (CA-SDI-10270) located along the route of the proposed trail between the NE portion of the Preserve and Rangeland Road. Ideally, the route of the trail should be adjusted to avoid this resource entirely (Mitigation Measure 2). However, currently the location of the site is only known through records search data. Because it does not occur on the Preserve, it was not revisited during the cultural resources inventory for the Preserve (Case and Carrico 2010). Prior to trail construction, then, the location of the site should be confirmed in the field to see if it can be avoided (Mitigation Measure 2). However, since the easement is only 25-feet wide, it may not be possible to avoid the resources. If avoidance is infeasible, a limited program of subsurface archaeological testing should be implemented to evaluate the resource for significance according to CRHR and San Diego RPO criteria. If the resource is found significant and cannot be avoided, additional mitigation would need to be developed, which might include data recovery excavation.

In addition, it is possible that ground disturbing activity, even in areas with no known cultural resources, could impact previously unrecorded cultural resources and human remains. For this reason, provisions for the unanticipated discovery of unrecorded cultural resources and human remains are included below (Mitigation Measures 4 and 5).

4.2.3 Preserve Infrastructure Improvements

Lastly, infrastructure improvements, which propose to alter or demolish extant historic-period structures and which will involve ground disturbing activity, such as trenching of an existing water line and grading for parking, also have the potential to damage or destroy cultural resources. Infrastructure improvements will occur primarily in the NE portion of the Preserve. Two cultural resources are located in the area of the proposed staging area: CA-SDI-16579 and P-37-025102. However, according to the 2003 site record, P-37-025102, a historic ranch complex, has been determined ineligible for listing in the CRHR because it lacks distinctive architectural and design characteristics, and is not associated with significant people or events in local, state, or regional history. This evaluation applies to the residence as well as associated structures, including a barn and rodeo corral. CA-SDI-16579, a historic trash scatter, has been recommended as ineligible in this document because of its poor information potential and disturbed context.

A single prehistoric resource, CA-SDI-16628, is located in a nearby area where a pavilion will be constructed as a viewpoint. This resource has not been evaluated and so must be considered significant. However, it appears that the resource can be avoided through design and may, indeed, be separated from the pavilion and trail terminus by a gate; if so, the resource will not be impacted (Mitigation Measure 2).

5.0 MANAGEMENT CONSIDERATIONS—MITIGATION MEASURES AND DESIGN CONSIDERATIONS

5.1 Mitigatable Impacts

There are no unavoidable impacts that cannot be reduced through mitigation. To reduce impacts to less than significant levels, the following mitigation measures shall be implemented.

MM-1: Preserve RMP and VMP Management Directives. Prior to any ground disturbing activities prescribed in the Preserve RMP and VMP, including fire management, invasive non-native plant removal efforts, and revegetation, the proposed area of activity will be reviewed for cultural resources. If cultural resources occur in the area, ground disturbing impacts in the area of the resource should be avoided, thereby fulfilling the management directives for cultural resources. To avoid impacts, the Preserve RMP and Preserve VMP generally stipulate the use of techniques that would not disturb the ground, such as passive habitat restoration and vegetation removal. If avoidance and non-destructive methods are infeasible, the affected resource should be evaluated for significance by a qualified archaeologist, per County guidelines.

MM-2: Avoidance. Prior to the construction of any new trail segments or the proposed bridge, all of which were located to avoid cultural resources, the locations of new construction shall be field checked by a qualified archaeologist to ensure that they do indeed avoid known cultural resources. To avoid adverse impacts to P-37-030845 (County Survey Road 97), a federal, state and locally significant resource, a passive form of revegetation shall be adopted for restoration of the southern loop trail of County Survey Road 97.

For CA-SDI-1270, a resource located along the proposed east-west connector trail on non-Preserve land, the location of the site shall be confirmed in the field by a qualified archaeologist and the trail shall be rerouted if possible to avoid impacts. If avoidance is infeasible, the resource should be evaluated for significance by a qualified archaeologist, per County guidelines.

The location of the proposed viewing pavilion/kiosk in the NE portion of the Preserve shall be designed to avoid the one cultural resource in the area, CA-SDI-16628.

All trail signs, markers, fencing, and gates in the Preserve should be placed in areas that avoid known cultural resources. If this recommendation cannot be met, MM-4 shall be followed during installation.

MM-3: Protective Fencing. Permanent split rail fencing with signage (e.g., signs that read “Please Stay on Trail”) shall be placed along the trail route in the NW portion of the Preserve in the vicinity of CA-SDI-19558, a sensitive cultural resource identified by Native American representations. The fencing should be placed along that portion of the trail from which the site can be accessed. The purpose would be to protect the resource from unauthorized visitation.

MM-4: Monitoring. All ground disturbing activity related to implementation of the project, including installation of trail signage, potential building removal, trenching, grading associated with trail installation, etc. shall be monitored by a qualified archaeologist and, where the resource involved is a prehistoric archaeological site, by a Native American representative. If

cultural resources are discovered during monitoring, all work within 50 feet of the discovery shall stop until a qualified archaeologist can evaluate the find and make appropriate recommendations for treatment.

MM-5: Protection of Human Remains. Any ground disturbing activities on the Preserve must be considered as having the potential to encounter Native American human remains. Human remains require special handling and must be treated with appropriate dignity. Specific actions must take place pursuant to CEQA Guidelines Section 15064.5e, Public Resources Code (PRC) Section 5097.98, and Section 87.429 of the County of San Diego Grading, Clearing and Watercourses Ordinance.

Should Native American human remains be identified during ground disturbing activities related to the project, whether during construction, maintenance, or any other activity as outlined in the Preserve RMP and Preserve VMP, state and county mandated procedures shall be followed for the treatment and disposition of those remains, as follows:

In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, DRP will ensure that the following procedures are followed:

1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
 - a. A County (DPR) official is contacted.
 - b. The County Coroner is contacted to determine that no investigation of the cause of death is required.
 - c. If the Coroner determines the remains are Native American, then:
 - i. The coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours.
 - ii. The NAHC shall identify the person or persons it believes to be most likely descended from the deceased Native American.
 - iii. The Most Likely Descendent (MLD) may make recommendations to the landowner (DPR), or the person responsible for the excavation work, for the treatment of human remains and any associated grave goods as provided in PRC Section 5097.98.
2. Under the following conditions, the landowner or its authorized representative shall rebury the Native American human remains and associated grave goods on the property in a location not subject to further disturbance:
 - a. The NAHC is unable to identify a MLD or the MLD fails to make a recommendation within 24 hours after being notified by the NAHC.
 - b. The MLD fails to make a recommendation.

- c. The landowner or his authorized representative rejects the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner.
- 3. Any time human remains are encountered or suspected and soil conditions are appropriate for the technique, ground penetrating radar (GPR) will be used as part of the survey methodology. In addition, the use of canine forensics will be considered when searching for human remains. The decision to use GPR or canine forensics will be made on a case-by-case basis through consultation among the County Archaeologist, the project archaeologist, and the Native American monitor.
- 4. Because human remains require special consideration and handling, they must be defined in a broad sense. For the purposes of this document, human remains are defined as:
 - a. Cremations, including the soil surrounding the deposit.
 - b. Interments, including the soils surrounding the deposit.
 - c. Associated grave goods.

In consultation among the County archaeologist, project archaeologist, and Native American monitor, additional measures (e.g., wet-screening of soils adjacent to the deposit or on-site) may be required to determine the extent of the burial.

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7.0 LIST OF PREPARERS AND PERSONS AND ORGANIZATIONS CONTACTED

Preparers:

Michael R. Bever, PhD, RPA	ICF International, Project Principal Investigator
Karolina A. Chmiel, M.A.	ICF International, Project Archaeologist

Persons and Organizations Contacted:

Jennifer Price	County of San Diego Department of Parks and Recreation, Land Use/Environmental Planner
Louis Guissac	Kumeyaay Diegueño Land Conservancy/Board Member
Clint Linton	Red Tail Monitoring
Dave Toller	San Pasqual Band of Indians/Tribal Councilman
Richard Carrico	Receurdos Research/Historical Researcher

8.0 LIST OF MITIGATION MEASURES AND DESIGN CONSIDERATIONS

Mitigation Measure	Design Consideration
<p>MM-1: Preserve RMP and VMP Management Directives. Prior to any ground disturbing activities prescribed in the Preserve RMP and VMP, including fire management, invasive non-native plant removal efforts, and revegetation, the proposed area of activity will be reviewed for cultural resources. If cultural resources occur in the area, ground disturbing impacts in the area of the resource should be avoided, thereby fulfilling the management directives for cultural resources. To avoid impacts, the Preserve RMP and Preserve VMP generally stipulate the use of techniques that would not disturb the ground, such as passive habitat restoration and vegetation removal. If avoidance and non-destructive methods are infeasible, the affected resource should be evaluated for significance by a qualified archaeologist, per County guidelines.</p>	Avoidance; Test and evaluation if avoidance is infeasible; Use of passive vegetation restoration
<p>MM-2: Avoidance. Prior to the construction of any new trail segments or the proposed bridge, all of which were located to avoid cultural resources, the locations of new construction shall be field checked by a qualified archaeologist to ensure that they do indeed avoid known cultural resources. To avoid adverse impacts to P-37-030845 (County Survey Road 97), a federal, state and locally significant resource, a passive form of revegetation shall be adopted for restoration of the southern loop trail of County Survey Road 97.</p> <p>For CA-SDI-1270, a resource located along the proposed east-west connector trail on non-Preserve land, the location of the site shall be confirmed in the field by a qualified archaeologist and the trail shall be rerouted if possible to avoid impacts. If avoidance is infeasible, the resource should be evaluated for significance by a qualified archaeologist, per County guidelines.</p> <p>The location of the proposed viewing pavilion/kiosk in the NE portion of the Preserve shall be designed to avoid the one cultural resource in the area, CA-SDI-16628.</p> <p>All trail signs, markers, fencing, and gates in the Preserve should be placed in areas that avoid known cultural resources. If this recommendation cannot be met, MM-4 shall be followed during installation.</p>	Avoidance; Use of passive vegetation restoration
<p>MM-3: Protective Fencing. Permanent split rail fencing with signage (e.g., signs that read "Please Stay on Trail") shall be placed along the trail route in the NW portion of the Preserve in the vicinity of CA-SDI-19558, a sensitive cultural resource identified by Native American representations. The fencing should be placed along that portion of the trail from which the site can be accessed. The purpose would be to protect the resource from unauthorized visitation.</p>	Avoidance
<p>MM-4: Monitoring. All ground disturbing activity related to implementation of the project, including installation of trail signage, potential building removal, trenching, grading associated with trail maintenance, etc. shall be monitored by a qualified archaeologist and, where the resource involved is a prehistoric archaeological site, by a Native American representative. If cultural resources are discovered during monitoring, all work within 50 feet of the discovery shall stop until a qualified archaeologist can evaluate the find and make appropriate recommendations for treatment.</p>	Avoidance; Test and evaluation if avoidance is infeasible

Mitigation Measure	Design Consideration
<p>MM-5: Protection of Human Remains. Any ground disturbing activities on the Preserve must be considered as having the potential to encounter Native American human remains. Human remains require special handling and must be treated with appropriate dignity. Specific actions must take place pursuant to CEQA Guidelines Section 15064.5e, Public Resources Code (PRC) Section 5097.98, and Section 87.429 of the County of San Diego Grading, Clearing and Watercourses Ordinance.</p> <p>Should Native American human remains be identified during ground disturbing activities related to the project, whether during construction, maintenance, or any other activity as outlined in the Preserve RMP and Preserve VMP, state and county mandated procedures shall be followed for the treatment and disposition of those remains, as follows:</p> <p>In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, DPR will ensure that the following procedures are followed:</p> <ol style="list-style-type: none"> 1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until: <ol style="list-style-type: none"> a. A County (DPR) official is contacted. b. The County Coroner is contacted to determine that no investigation of the cause of death is required. c. If the Coroner determines the remains are Native American, then: <ol style="list-style-type: none"> i. The coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours. ii. The NAHC shall identify the person or persons it believes to be most likely descended from the deceased Native American. iii. The Most Likely Descendent (MLD) may make recommendations to the landowner (DPR), or the person responsible for the excavation work, for the treatment of human remains and any associated grave goods as provided in PRC Section 5097.98. 2. Under the following conditions, the landowner or its authorized representative shall rebury the Native American human remains and associated grave goods on the property in a location not subject to further disturbance: <ol style="list-style-type: none"> a. The NAHC is unable to identify a MLD or the MLD fails to make a recommendation within 24 hours after being notified by the NAHC. b. The MLD fails to make a recommendation. c. The landowner or his authorized representative rejects the recommendation of the MLD, and mediation by the NAHC fails 	<p>Avoidance</p>

Mitigation Measure	Design Consideration
<p>to provide measures acceptable to the landowner.</p> <ol style="list-style-type: none"> 3. Any time human remains are encountered or suspected and soil conditions are appropriate for the technique, ground penetrating radar (GPR) will be used as part of the survey methodology. In addition, the use of canine forensics will be considered when searching for human remains. The decision to use GPR or canine forensics will be made on a case-by-case basis through consultation among the County Archaeologist, the project archaeologist, and the Native American monitor. 4. Because human remains require special consideration and handling, they must be defined in a broad sense. For the purposes of this document, human remains are defined as: <ol style="list-style-type: none"> a. Cremations, including the soil surrounding the deposit. b. Interments, including the soils surrounding the deposit. c. Associated grave goods. <p>In consultation among the County archaeologist, project archaeologist, and Native American monitor, additional measures (e.g., wet-screening of soils adjacent to the deposit or on-site) may be required to determine the extent of the burial.</p>	

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CONFIDENTIAL - APPENDIX A
Resource Location Maps

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